DOCUMENT RESUME

ED 109 917 FL 007 016

AUTHOR Kretschmer, Richard R.
TITLE Written Language of the Hearing Impaired - Deviant, Delayed, or Different.
PUB DATE [74]
NOTE 18p.

EDRS PRICE MF-$0.76 HC-$1.58 PLUS POSTAGE
DESCRIPTORS *Aurally Handicapped; Child Language; Cognitive Processes; Deaf; *Language Development; Language Research; Nonstandard Dialects; *Psycholinguistics; *Retarded Speech Development; Semantics; Syntax; *Written Language

ABSTRACT

Traditional research on the written language of hearing-impaired persons has tended to support a position of deviant language processing in such individuals. The major reason for such findings has been directly related to the lack of appropriate control groups. Recent studies which have emphasized the comparison of the language of hearing-impaired writers against normally hearing peers, rather than against an abstraction called "English," have supported the notion of linguistic delay, rather than deviancy. The latter studies, however, have placed their emphasis on syntactic consideration rather than the more promising semantic constraints. Research by this author which considered 100 syntactic and semantic aspects is congenerous with recently stated positions by Quigley and associates, namely that "deviant" and "delayed" language systems may exist side by side. Indeed, since the "deviant" rules seem consistent across large numbers of hearing-impaired writers, one could argue that these should be considered dialectal in nature, arising either from the effects of hearing impairment itself, or imposed by the educational and/or social isolation of deafness. (Author)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

ED109917

WRITTEN LANGUAGE OF THE HEARING IMPAIRED - DEVIANT, DELAYED, OR DIFFERENT

Richard R. Kretschmer
University of Cincinnati

The program title for this presentation suggests a focus on the treatment of children with language dysfunction. In a sense that will be the topic, but instead of discussing oral language problems, I would like to follow Ms. Ganschow's lead by focusing on the written compositions of hearing impaired children and young adults, particularly as these writings seem to form a variation of English, which we will discuss later as Deaf English.

For the language performance of children described as having linguistic dysfunction, two classifications have been used to explain such language acquisition problems, namely: 1) the category of linguistic rule deviancy or 2) severe delay in language onset. These two concepts have been used to describe language in children whose problems include hearing impairment, mental retardation, behavioral/emotional disorder, or socio-economic disadvantage (Bereiter and Englemann; Cooper; Fuller; Lee; Lenneberg, Nichols and Rosenburger; Leonard; Menyuk; Newfield and Schlanger; Schmitt). There is, however, clear evidence that the child who is a non-standard dialect speaker or socially

FL007016

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

disadvantaged, has neither a language deviance or a delay, but well ordered systematic language performance like any other in his speech community (Baratz; Cazden; Houston; Labov and Cohen). Thus, such children's language performance can be described as dialectical rather than deviant or delayed. I do not wish to consider these latter children, but rather to focus on use of the aforementioned classifications as applied to significantly hearing impaired children. The concepts of deviancy and/or delay when applied to deaf persons have engendered a controversy among researchers and educators as to whether the language performance of deaf persons is predominantly deviant, delayed, or some combination of these concepts, or perhaps even dialectical in nature.

Before pursuing this controversy, let me offer working definitions of the descriptive terms. Since the focus in describing language should be in reference to its rule base and developmental patterns, each definition will be framed from that perspective. Linguistic rule deviancy can be defined as the condition in which a child or person using language has no identifiable rule system, or has developed a rule system that is totally or partially at odds with the mother tongue and normal developmental patterns. In the latter case, there is presumably no congruence between the target language to be

learned or the developmental stages specified for normally hearing children as they move stage by stage toward closer approximations of the adult grammar, and the rule system of the linguistically deviant child. Language delay, on the other hand, refers either to a condition in which the child displays rule understanding that is developmentally similar to productions actually recorded for younger children, or which shows a lag at all ages, but is still progressing toward more sophisticated language behavior even though the end product may not be anything like adult forms. Dialectical difference refers to the situation in which the child has acquired a rule system that is consistent, but different from that of the majority language. In this instance, the child's rule system has developed, but because of some external factors which are consistent across all children of his speech community, his language patterns are systematically different from that of the majority or power dialect. To qualify as a dialect of the majority language, however, it must be intelligible to users of that standard dialect. Deviancy or delay appear in isolated children and seem to be idiosyncratic for these children, whereas dialectical differences presuppose consistent language performance within entire speech or language communities, for example, speakers of Black English.

Traditionally, hearing impaired youngsters have been viewed

as deviant language learners. The primary proponents of the deviant effects of hearing impairment have stemmed from and been deeply influenced by the works of Myklebust (1964) and Furth (1966). Myklebust has advocated the notion that, since hearing serves a primary information source, its elimination produces an organismic shift in children, which results in a total reorganization of sensori-cognitive processing. Thus, when language forms are superimposed on this imperfect base, what results is a deviant language system. In contrast, Furth states that the only effect of deafness is on language learning per se, and the cognitive processes that are dependent on linguistic mastery. It is his supposition that all non-language learning of the child is unaffected, and that the deaf child quickly develops an idiolect based on nonauditory communication. Implicit in this position is the notion that deaf children must have difficulty in acquiring verbal (oral/auditory) language since it must be superimposed on a child who is functioning well without it and who indeed has no motivation or need to learn it. From his writing, Furth seems very pessimistic about the deaf child's ability to achieve "normal" language function regardless of instructional mode.

With such theoretical models dominant in the area of hearing impairment, it is not surprising that the intensive research into language functioning of hearing impaired children

or adults has resulted in interpretations that favor the deviant position. Several studies by Quigley and the University of Illinois research group (Wilbur and Quigley, 1971, 1972), by Lowenbraun (1970), Myklebust (1964), Schmitt (1968) and others have generated data, often from a psycholinguistic frame of reference, that has been interpreted in this vein. To familiarize the audience with this type of research, I want to discuss one of these studies briefly, one by Wilbur and Quigley (1972) on deaf children's understanding of relative clauses. The study consisted of administering a test in which 450 hearing impaired youngsters, ranging in age from ten to eighteen years, had to indicate their acceptance of inappropriate linguistic forms employing relative clause restrictions. The results indicated that hearing impaired children had a tendency to read the surface order of the sentence rather than looking at its deep structure. Such behavior resulted in these children thinking that the girl went home rather than the boy in such sentences as THE BOY, WHO HIT THE GIRL, WENT HOME. Such behavior was interpreted as deviant or unexpected language performance.

The primary difficulty with studies such as I have just referred to is that they persist in comparing the linguistic performance of hearing impaired children against a perfect norm, namely, adult or mature English usage. Research on normally

hearing children developing language done by such researchers as Bloom (1973), Brown (1973), Ferguson and Slobin (1973), and Menyuk (1971) indicate that children rarely, if ever, use, receptively or expressively, what linguists define as perfect or mature English. Sanders (1971) in her study of adult comprehension of ask and tell constructions even raises a question as to whether the concept of adult or mature English even exists at all. It seems risky therefore, to compare any different language user against an absolute norm. Unfortunately, even in those few studies in which comparisons have been made against actual language samples of normally hearing children of identical chronological age or of presumed language developmental age equivalency, research focus is usually on error amount of the deaf subjects with little discussion on the qualitative performance of either group.

The concept of delay in hearing impaired children's language acquisition has been explored using actual language behavior from normally hearing children as the base of comparison. Studies done at the University of Cincinnati by Morrison (1970), Juenke (1971), and Hess (1972) and studies such as those completed by Tweney and Hoemann (1973), Power and Quigley (1973) and Kretschmer (1972) have suggested that the deaf child's problem

is primarily a lack of experience with language, which results in a significant developmental lag in acquisition, rather than the acquisition of grossly deviant language patterns.

A survey of two of these studies will flesh out the delay model. Morrison (1970) studied thirty hearing impaired youngsters and sixty normally hearing youngsters, ages twelve to sixteen years, who gave drawing responses to the Northwestern Syntax Screening Test sentences. The latter test presents two sentences in a contrastive manner to ascertain whether knowledge of a particular linguistic form exists, such as THE FISH IS SWIMMING and THE FISH ARE SWIMMING to ascertain comprehension of singular and plural copula verbs. The study revealed two provocative findings: a) the patterns of difficulty for the two groups of students were parallel, so that the most difficult item for the hearing impaired was likely to be the most difficult for the normally hearing, and b) the types of picture portrayals made by both groups of children were essentially the same, which, because of the lack of age differences between the two groups, tend to argue for a delay explanation rather than a deviant rule model.

Hess's (1972) study was an attempt to track the language growth of a hearing impaired boy age four years nine months, whose hearing impairment had been discovered 19 months previously. The approach was one of recording linguistic utterances and

writing a grammar of the emerging language patterns. To investigate whether the effects of the language development program in which he was enrolled, which was based on the developmental literature then current, was productive, a comparison normally hearing child of comparable linguistic age was also studied during a five month time period. The results indicated that only two differences existed between the two children at the end of the study: first, that the hearing impaired child's SUBJECT POSITION was less differentiated, probably a result of teaching since only his name, his mother's, and his teacher's were used throughout this period in subject position; secondly, the hearing impaired child had achieved a more complete negation grammatical form than had the normally hearing child. Even though chronologically almost two years apart, when the subjects were matched on linguistic age at the beginning of the study, similar language growth was observed, thus, showing only a language delay difference between the two children.

It is, of course, possible that a compromise of these two positions may be nearer the truth, namely, that deviant, delayed, and even normal systems exist side by side. For example, Quigley, Smith, and Wilbur (1974) in examining normally hearing and hearing impaired children's willingness to accept as correct

instances of various types of incorrect usages of relative clauses observed that deaf children were willing to accept certain forms more frequently than normally hearing children, whereas other forms were shown to be accepted in a similar fashion by the two groups. In a second study by Quigley, Wilbur, and Montanelli (1974) on comprehension of question forms, hearing impaired children were again more willing to accept irregular forms such as copying as in sentences like WHERE THE DOG IN THE PARK? than were a sample of normally hearing children, even though development of an understanding of yes-no questions and wh-question forms was progressing in a similar manner. These findings lead those authors to suggest that developmental and deviant rule systems may exist side by side in the deaf child.

In support of this position, Kretschmer (1974), in a study of the written language of approximately 1200+ normally hearing and 1200+ hearing impaired writers, ages eight through twenty, from a variety of educational settings, has observed some unusual performance particularly with reference to semantic equivalents. For instance, some stative/process verbs in English take infinitive complements only, whereas others take action nominal complements only, while still others take both. Want is an example of the first type of verb; enjoy of the second; and like of the third. In the stories of hearing impaired children, except for children from a single school for the

deaf, the rule seems to divide stative/process verbs into only two classes, namely, those verbs that take infinitives and those that take both infinitive and action nominal constructions. It appears that for these writers the action nominal only category of verbs have been regularized into the infinitive category, thus, resulting in sentences such as HE IS ENJOYING TO WORK. Such classification of process/stative verbs has not been observed among the normally hearing writers in this sample.

I have also noted instances of language delay in these compositions. For example, one of the most difficult constructions for hearing impaired children to master is the use of prepositions. Adverbial prepositions can be divided by their semantic function within sentences, that is, adverbials of location, time, causality, reason, possession, and so forth. Clark (1973) suggests that location adverbials are among the first to be established in the verbal comprehension/output of normally hearing children. Clark has also postulated that stationary prepositions are achieved before directional ones, and that the dimensional aspect, that is, one, two or three dimensions, is ignored in the early acquisition of these forms. In examining the use of location prepositions by young hearing impaired writers, it is evident that hearing impaired youngsters use stationary prepositions in place of

directional ones, resulting in sentences such as I RODE AT CHICAGO, and that the dimensional constraints of prepositions were often ignored resulting in sentences such as I PUT THE BALL AT THE BOX. Such confusions also appeared in normally hearing writers up to about thirteen years of age, so that with respect to this form, the primary differences are ones of intensity of error rate and their persistence through the twenty year old composition of the hearing impaired writers.

Thus, I have begun to tentatively hypothesize the coexistence of deviant and developmentally delayed systems in the grammars of hearing impaired children. Might it not be simpler, however, to describe these rules as constituting a dialectical difference rather than showing a complicated assortment of deviant, delayed, and normal rules. Nonstandard dialects are used by speech communities that generally have more in common than the way they speak such as economic or geographic conditions and are generally also groups that are sociologically isolated from the power structure. If the written language performance of the hearing impaired stems from influences such as its interaction with sign or gesture language, the absence of early stimulation, and/or the use of consistent "deaf" teaching strategies, then, these common factors could and probably should result in a nonstandard dialect, or Deaf English.

Studies on Deaf English show that it, in fact, does share characteristics with another nonstandard dialect, Black English, such as different use of the copula, of pronoun redundancy, as well as having unique features of its own which are syntactically different, but predominantly semantically different in nature. The fact that Deaf English was not observed in all children in the Kretschmer (1974) study suggests that deafness per se cannot explain its appearance. Quigley, Smith, and Wilbur (1974) among others have suggested that the interaction between the primary sign language used among deaf individuals and their limited exposure to standard forms could result in systematic deviations, which, in our opinion, could be one source of dialectical variation.

Another factor in dialectical variation could be the methods of instruction used with deaf children. For instance, enjoy is often given as a synonym of like to deaf children, and like is chiefly used in its infiritive form during the early period of deaf children's language development. Thus, through the information provided, the deaf child comes to hypothesize a single rule for both like and enjoy, which becomes differentiated for like, but not for enjoy. In this instance, a teaching methodology has contributed to formation of a nonstandard English rule, which is so consistent across the 1200+ children I studied that it assumes the position of a dialectical variation.

Compounded over many rules deaf writers could then come to constitute a group apart from the standard dialect users of written English.

Lastly, the isolation imposed by school settings on hearing impaired youngsters too could be a source of dialectical variation. Because of the lack of varied models and the need or desire to control linguistic, as well as social, input into children, the deaf child is confined to a single pattern of response, which becomes resistive to change when he leaves school as an adult speaker. This situation is analogous to that of the so-called Black dialectical speaker. Because of racial, socio-economic factors, he is confined to a set of dialectical speakers and unless encouraged as a child, becomes less and less receptive to code switching or relearning as he approaches maturity. Code switching only becomes possible, however, when two conditions are met: 1) the child is provided with appropriate models of the target code and 2) he is not humiliated in his attempts to learn the second code, factors which are not necessarily present in current school settings for hearing impaired children.

The implications of this position are manifold. However, the most immediate and relevant point is a need for a reexamination of our teaching systems and procedures with hearing impaired children, unless it is our position to systematically promote

Deaf English, a language system which to date has effectively excluded deaf persons from access to their rightful academic, vocational and social place in society.

BIBLIOGRAPHY

Baratz, J.: Language and cognitive assessment of Negro children: assumptions and research needs. ASHA 11 (1969), 87-91.

Bereiter, C. and Englemann, S.: Teaching disadvantaged children in the preschool. Englewood Cliffs: Prentice-Hall, 1966.

Bloom, Lois: One word at a time. The Hague: Mouton and Company, 1973.

Brown, Roger: A first language: the early stages. Cambridge: Harvard University Press, 1973.

Cazden, C.: Three sociolinguistic views of the language and speech of lower class children with special attention to the work of Basil Bernstein. Developmental Medicine and Child Neurology, 10 (1968), 600-611.

Clark, Herbert: Space, time, semantics, and the child, in Timothy Moore (ed.) Cognitive Development and the Acquisition of Language. New York: Academic Press, 1973.

Cooper, R.: The ability of deaf and hearing children to apply morphological rules. Journal of Speech and Hearing Review, 10 (1967), 77-85.

Ferguson, Charles and Slobin, Dan: Studies of child language development. New York: Holt, Rinehart, and Winston, 1973.

Fuller, Margaret: Understanding English grammar without the ability to speak. Unpublished paper, University of California at Berkeley, 1966.

Furth, Hans: Thinking without language: psychological implications of deafness. New York: Free Press, 1966.

Hess, Linda: A longitudinal transformational generative comparison of the emerging syntactic structure in a deaf child and a normally hearing child. Unpublished Master Thesis, University of Cincinnati, 1972.

Houston, Susan: A reexamination of some assumptions about the language of the disadvantaged child. Child Development. 41 (1970), 947-963.

Juenke, Dorothy: An application of a generative-transformational model of linguistic description to the linguistic output of hearing impaired subjects in the generation and expansion stages of language development. Unpublished Master Thesis, University of Cincinnati, 1971.

Kretschmer, Richard: Transformational linguistic analysis of the written language of hearing impaired and normal hearing students. Unpublished Doctoral Dissertation: Teachers College, Columbia University, 1972.

Kretschmer, Richard: A transformational analysis of normally hearing and hearing impaired written language. Research in progress at the University of Cincinnati, 1974.

Labov, W. and Cohen, P.: Systematic relations of standard and nonstandard rules in the grammars of Negro speakers. Project Literary Reports, No. 8, Ithica: Cornell University, 66-82.

Lee, Laura: Developmental sentence types: a method for comparing normal and deviant syntactic development. Journal of Speech and Hearing Disorders, 31 (1966), 311-330.

Lenneberg, Eric; Nichols, I.; and Rosenberger, P.: Primitive stages of language development in mongolism. Disorders of Communication: XLIII Research Publications, A.R.W.M.D. Baltimore: Williams and Wilkins, 1964.

Leonard, Laurence: What is deviant language? Journal of Speech and Hearing Disorders, 37 (1972), 427-446.

Lowenbraun, Sheila: An investigation of the syntactic competence of young deaf children. Unpublished Doctoral Dissertation, Teachers College, Columbia University, 1970.

Menyuk, Paula: The acquisition and development of language. Englewood Cliffs: Prentice-Hall, Inc., 1971.

Morrison, Allen: An investigation of the utility of drawing as a means of expressing understanding of certain linguistic rules by hearing impaired and normal hearing adolescents. Unpublished Master Thesis, University of Cincinnati, 1970.

Myklebust, H.: The psychology of deafness. Second edition. New York: Grune and Stratton, Inc., 1964.

Newfield, M. and Schlanger, B.: The acquisition of English morphology by normal and educable mentally retarded children. Journal of Speech and Hearing Review, 11 (1968), 693-706.

Power, D. and Quigley, Stephen: Deaf children's acquisition of the passive voice. Journal of Speech and Hearing Review, 16 (1973), 5-11.

Quigley, Stephen; Smith, N.; and Wilbur, Ronnie: Comprehension of relativized sentences by deaf students. Journal of Speech and Hearing Review, 17 (1974), 325-342.

Quigley, Stephen; Wilbur, Ronnie; and Montanelli, D.: Question formation in the language of deaf students. Journal of Speech and Hearing Review, 17 (1974), 699-713.

Sanders, Lois: The comprehension of certain syntactic structures by adults. Journal of Speech and Hearing Review, 14, (1971), 739-745.

Schmitt, Philip: Deaf children's comprehension and production of sentence transformations. Unpublished Doctoral Dissertation, University of Illinois, 1968.

Tweney, Ryan and Hoemann, Harry: The development of semantic associations in profoundly deaf. Journal of Speech and Hearing Review, 16 (1973), 309-318.

Wilbur, Ronnie and Quigley, Stephen: Conjoined structures in the written language of deaf children. Paper delivered at American Speech and Hearing Association Convention, 1971.

Wilbur, Ronnie and Quigley, Stephen: Deviant processing of relative clauses by deaf children. Paper delivered at American Speech and Hearing Association Convention, 1972.